In the Claims:

Please amend claims 1 and 14 as set forth below in the "Listing of Claims".

Please add new claims 15 and 16 as set forth in the "Listing of Claims" below.

LISTING OF CLAIMS

Claim 1 (Currently Amended): A method of plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, by means of a parallel plate type plasma-etching apparatus; wherein the organic material film is plasma-etched with:

a high-frequency power of a frequency of 40 MHz or above for generating plasma; and

a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of 2×10^{-16} cm^2 or above, and a molecular gas, a flow-rate ratio of the ionization accelerating gas relative to the molecular gas in the process gas being 0.5 or above.

Claim 2 (Original): The method according to claim 1, wherein a plasma-etching apparatus is used, the apparatus including: a process vessel into which the process gas is supplied; and parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; and the high-frequency power for generating the plasma is applied to the support electrode.

Claim 3 (Original): The method according to claim 2, wherein a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions is further applied to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 4 (Original): The method according to claim 1, wherein a plasma-etching apparatus is used, the apparatus including: a process vessel into which the process gas is supplied; and parallel plate electrodes disposed in the process vessel, the electrodes being

constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; and the high-frequency power for generating the plasma is applied to the counter electrode; and a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions is applied to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 5 (Previously Presented): The method according to claim 3, wherein the process gas includes Ar as the ionization accelerating gas, and N_2 and H_2 as the molecular gas.

Claim 6 (Original): The method according to claim 3, wherein the process gas includes Ar as the ionization accelerating gas and NH_3 as the molecular gas.

Claim 7 (Original): The method according to claim 3, wherein a frequency of the high-frequency power for generating the plasma is 100 MHz.

Claim 8 (Original): The method according to claim 3, wherein a distance between the support electrode and the counter electrode in the parallel plate electrodes is 40 mm or below.

Claim 9 (Withdrawn): An apparatus for plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, comprising: a process vessel that contains the substrate; parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; a process gas supply system that supplies a process gas into the process vessel; an evacuating system that evacuates an atmosphere of the process vessel; and a first high-frequency power source that supplies a high-frequency power for generating plasma to the support electrode; wherein the first high-frequency power source supplies a high-frequency power of a frequency of 40 MHz or above; and the process gas supply system supplies a process gas including an ionization accelerating gas that is ionized from a

ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of 2×10^{-16} cm^2 or above, and a molecular gas.

Claim 10 (Withdrawn): The apparatus according to claim 9, further comprising: a second high-frequency power source that supplies a high-frequency power of a frequency of 500 kHz to 27 MHz for drawing ions to the support electrode, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below.

Claim 11 (Withdrawn): An apparatus for plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, comprising: a process vessel that contains the substrate; parallel plate electrodes disposed in the process vessel, the electrodes being constituted by a support electrode on which the substrate is supported, and a counter electrode that is opposed to the support electrode; a process gas supply system that supplies a process gas into the process vessel; an evacuating system that evacuates an atmosphere of the process vessel; a first high-frequency power source that supplies a high-frequency power for generating plasma to the counter electrode; and a second high-frequency power source that supplies a high-frequency power for drawing ions to the support electrode; wherein the first high-frequency power source supplies a high-frequency power of a frequency of 40 MHz or above; the second high-frequency power source supplies a high-frequency power of a frequency of 500 kHz to 27 MHz, such that an absolute value of the self-bias voltage of the support electrode is 500 V or below; and the process gas supply system supplies a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of 2×10^{-16} cm^2 or above, and a molecular gas.

Claim 12 (Withdrawn): The apparatus according to claim 10, wherein a frequency of the high-frequency power supplied by the first high-frequency power source is 100 MHz.

Claim 13 (Withdrawn): The apparatus according to claim 10, wherein a distance between the support electrode and the counter electrode in the parallel plate electrodes is 40 mm or below.

Claim 14 (Currently Amended): A method of plasma-etching an organic material film formed on a substrate with an inorganic material film used as a mask, by means of a parallel plate type plasma-etching apparatus; wherein the organic material film is plasma-etched with:

a high-frequency power of a frequency of 40 MHz to 150 MHz for generating plasma; and

a process gas including an ionization accelerating gas that is ionized from a ground state or metastable state with an ionization energy of 10 eV or below and has a maximum ionization cross-section of 2×10^{-16} cm^2 or above, and a molecular gas, a flow-rate ratio of the ionization acceleration gas relative to the molecular gas in the process gas being 0.5 or above.

Claim 15 (New): The method according to claim 1, wherein the process gas includes Ar, N_2, and H_2, a flow-rate ratio of Ar relative to N_2 and H_2 in the process gas being 5/9 or above.

Claim 16 (New): The method according to claim 1, wherein the process gas includes Ar and NH_3, a flow-rate ratio of Ar relative to NH_3 in the process gas being 1.0/1.0 or above.